

Vladimir Yurovsky

List of Publications

PAPERS IN REFERRED JOURNALS

- [1] Pazdersky, V. A., Usachenko, V. I. & Yurovsky, V. A. Multiphoton absorption of the electromagnetic radiation momentum in plasma. *Sov. Phys. J.* **26**, 471–475 (1983).
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- [11] Bychkov, V. L. & Yurovsky, V. A. Numerical simulation of a water vapour beam-plasma. *High Temperature* **31**, 5–14 (1993).

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- [13] Pazdersky, V. A., Redko, O. N. & Yurovsky, V. A. On the threshold photodecay in a two-color field. *Laser Physics* **4**, 1151–1154 (1994).
- [14] Pazdersky, V. A. & Yurovsky, V. A. Photoionization by a bichromatic field: Adiabatic theory. *Phys. Rev. A* **51**, 632–640 (1995).
- [15] Yurovsky, V. A. & Ben-Reuven, A. Incomplete optical shielding in cold atom traps: three-dimensional Landau-Zener theory. *Phys. Rev. A* **55**, 3772–3779 (1997).
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CHAPTERS IN BOOKS

- [1] Yurovsky, V. & Ben-Reuven, A. Incomplete optical shielding in cold sodium atom traps. In *Spectral Line Shapes Vol. 9, Proceedings of the 13th Conference on Spectral Line Shapes*, no. 386 in AIP Conf. Proc., 271 – 274 (AIP, New York, 1997).
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- [6] Yurovsky, V. A., Olshanii, M. & Weiss, D. S. Collisions, correlations, and integrability in atom waveguides. In *Adv. At. Mol. Opt. Phys.*, vol. 55, 61–138 (Elsevier Academic Press, New York, 2008).

INVITED TALKS

1. Yurovsky V.A., Ben-Reuven A. Formation of a molecular Bose-Einstein condensate and an entangled atomic gas by Feshbach resonance. LPHYS'02, Bratislava, 2002.

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3. Yurovsky V.A. Formation of molecules due to Feshbach resonances in quantum gases. LPHYS'03, Hamburg, 2003.
4. Yurovsky V.A., Ben-Reuven A. Quantum many-body effects on curve crossing. Workshop on Radiationless and Laser-controlled Transitions, Holon, 2004.
5. Yurovsky V.A. Effect of Feshbach resonances on collisions in atomic waveguides. ITAMP Workshop: Quantum Degenerate Gases in Low-Dimensionality, Cambridge, 2004.
6. Yurovsky V.A. Quantum many-body theory of molecular formation in Bose gases due to Feshbach resonances. James Franck meeting on "Dynamics of cold Molecules" Rehovot, 2004.
7. Yurovsky V.A. Three-body collisions with Feshbach-resonance interactions in one dimension. LPHYS'05, Kyoto, 2005.
8. Yurovsky V.A. Properties, formation, and break-up of quasi-one-dimensional molecules. Minerva Workshop on Quantum Atom Optics, Eilat, 2005.
9. Yurovsky V.A. Reactions and inelastic collisions of quasi-one-dimensional atoms and molecules. LPHYS'06, Lausanne, 2006.
10. Yurovsky V.A. Non-integrability in atom waveguides. LPHYS'07, Leon, 2007.
11. Yurovsky V.A. Effect of non-integrability on reactions and collisions in quasi-one-dimensional ultracold gases. Batsheva de Rothschild Seminar on ultrafast-ultracold processes, Ein-Gedi, Israel, 2008.
12. Yurovsky V.A. Mechanisms of thermalization in two-dimensional optical lattices. LPHYS'08, Trondheim, 2008.
13. Yurovsky V.A., Olshanii M. Quantum chaos with ultracold atoms. LPHYS'09, Barcelona, 2009.
14. Yurovsky V.A., Olshanii M. Incomplete quantum chaos and the memory of initial conditions for ultracold atoms. The 4th Shanghai International Symposium on Nonlinear Science & Applications, Xuzhou - Shanghai, 2010.
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ABSTRACTS

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2. Bunkin F.V., Derzhiev V.I., Yurovsky V.A., Yakovlenko S.I. Modeling of the active medium of an argon-hydride exciplex laser. The 12-th All-Union conference on coherent and nonlinear optics. Moscow,1985.
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41. Yurovsky V.A. One-dimensional three-body problem with Feshbach resonance interactions. DAMOP, Lincoln, 2005.
42. Yurovsky V.A., Ben-Reuven A. Atom-to-molecule conversion in expanding BEC of Cs. LPHYS'05, Kyoto, 2005.

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50. Yurovsky V.A. Mechanisms of thermalization in coupled atom waveguides. Latsis Symposium "Bose Einstein Condensation in dilute atomic gases and in condensed matter", Lausanne, 2008.
51. Yurovsky V.A. Effects of tunneling on thermalization of quasi-one-dimensional gases. DAMOP, State College, 2008.
52. Yurovsky V.A., Olshanii M. Some exactly solvable quantum-chaotic models. DAMOP, Charlottesville, 2009.
53. Yurovsky V.A., Olshanii M. Quantum-chaotic behavior of trapped ultracold atoms. Bose-Einstein Condensation 2009: Frontiers in Quantum Gases, San Feliu de Guixols, 2009.
54. Yurovsky V.A., Olshanii M. Restricted thermalization and the memory of initial conditions in incompletely-chaotic quantum systems. Quantum Technologies Conference, Torun, 2010.
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56. Yurovsky V.A., Ben-Reuven A., Olshanii M. Dynamics of relaxation and the equilibrium state in an incompletely-chaotic quantum system. DAMOP, Atlanta, 2011.

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